Serial No. 09/662580

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

P

1-28 (Cancelled)

Claim 29 (Currently Amended) A method for authenticating a mobile station to a network **B**, comprising:

from the mobile station, wirelessly communicating to network B an identifier for the mobile station;

via wireless communications <u>between the mobile station</u> and with a base station A belonging to a network A, transacting with network A to obtain an encryption key K known only to network A and to the mobile station;

via wireless communications with base station A which are secured by key K, obtaining at the mobile station an authentication key SSD known only to network A, to the mobile station, and to a further network B;

via wireless communications with base station A, sending an authentication message from the mobile station to network A to be forwarded to network B, the authentication message comprising an identification number the identifier of the mobile station encrypted with SSD; and

if the authentication message is accepted by network B, entering the mobile station into wireless communications with a base station of network B.

Serial No. 09/662580

Claim 30 (Currently Amended) A method for authenticating a mobile terminal to a network, comprising:

via wireless communications between a mobile station and a network A, transacting with the mobile station to provide it with an encryption key K known only to network A and to the mobile station;

receiving an authentication key SSD and an identifier of the mobile station from a further network B as a result of a request sent from the mobile station to network B, said request including said identifier, and providing SSD to the mobile station via wireless communications which are secured by key K;

receiving from the mobile station, via wireless communications, an authentication message which comprises an identification number said identifier encrypted with SSD; and

forwarding the authentication message to network B.